

Abstract

The rotor position of a synchronous motor (2) is determined, in that for a plurality of current vectors (I) distributed
5 over one electrical rotation of the synchronous motor (2), the amount of the current vector (I) which is necessary to attain a defined deflection of the rotor (R) is determined. The position of the rotor (R) can be calculated from the position of the minima of the amounts thus determined, taking into
10 account the direction of rotation of the rotor (R). The engagement of a brake (5) ensures that grooving forces and machine vibrations play no role for the method to determine the rotor position.